

Work Order ID 153279

Tuesday, November 15, 2016 12:57:05 PM

Handwritten: 24/2
153279

Page 1

Item ID: 647.7304 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: EC135 T2/P2 Cable Cutters System
 Start Date: 11/15/2016 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 11/29/2016 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: **DAS 21 9-89** Date: **NOV 15 2016** Tooling: Date: Run Start ***NR1***
 QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr								
647.7300	C	DAS 21 9-89	NOV 15 2016	0.00				DAS 21 9-89	<i>17-11-15</i>

100 Document Control **DAS 28 9-89** **FEB 28 2017**
100
 DC Memo 0.00
 Doc.Control -USB or Paperwork Photocopy bluefile & type labels per PPP 647.7304

110 Pick Kit 0.00
110
 Packaging Memo 0.00
 Packaging **DAS 6 9-89** **NOV 15 2016** **DAS 27 9-89**

120 QC4- 100% Inspect kits for completeness 0.00
120
 QC Memo 0.00
 Quality Control **DAS 28 9-89** **FEB 28 2017**

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
Description Work Order Deviation				Disposition																																																													
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :			
Misidentified ☐	Past Due ☐																																																																

MAR 01 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : _____							

Picklist Print

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Page 1

Work Order ID: 153279

153279

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 11/15/2016

Required Date: 11/29/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 16.04.27 NEW ISSUE DD VERF:JLM IPP
REV:B 16.11.15 dwg rev.c DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

600.0990		Purchased	No				Each	17.0000		1			
600 0990 Magnabond 6398 Part A Size 112 ml													
DAS 28 9-89 NOV 16 2016 DAS 27 9-89													

5/30/2017

Location	Loc Qty	Loc Code
CA2	12	
M135600	12	
PKG	5	
M134167	1	
M134249	2	
M135213	2	

600.0991		Purchased	No				Each	16.0000		1			
600 0991 Magnabond 6398 Part B Size 112 ml													
DAS 28 9-89 NOV 16 2016 DAS 27 9-89													

DAS 28 9-89
5/30/2017

Location	Loc Qty	Loc Code
CA2	12	
m135600	12	
PKG	4	
m134167	1	
m134249	1	
m135213	2	

600.1012		Purchased	No				Each	13.0000		1			
600 1012 Sealant PR1425B2 (#654 sem)													
DAS 28 9-89 NOV 16 2016 DAS 27 9-89													

40P
DAS 28 9-89
5/30/2017

Location	Loc Qty	Loc Code
cck017	13	
m135407	1	
m135600	2	
m135840	10	

M136830

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By _____	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐ Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐		FAULT CATEGORY Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

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Page 2

Work Order ID: 153279

153279

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 11/15/2016

Required Date: 11/29/2016

Start Qty: 1.00

Required Qty: 1.00

601.2045

Purchased

No

Each

9.0000

1

601 2045

RTV (LOCTITE 598)

**

NOV 16 2016

DAS 6 27
9-89 9-89

DAS 28
9-89

Location

Loc Qty

Loc Code

CCK096

1

m135628

1

GA

8

m134260

8

601.2375

Manufactured

No

Each

62.0000

3

601 2375

Washer

**

NOV 16 2016

DAS 6 27
9-89 9-89

DAS 28
9-89

Location

Loc Qty

Loc Code

CCK096

62

91708

62

601.2999

Manufactured

No

Each

60.0000

3

601 2999

Screw

**

NOV 16 2016

DAS 6 27
9-89 9-89

DAS 28
9-89

Location

Loc Qty

Loc Code

CCK098

60

91707

10

93369

50

601.3004

Purchased

No

Each

14.0000

2

601 3004

Camloc Stud - 26S8-11

**

NOV 16 2016

DAS 6 27
9-89 9-89

DAS 28
9-89

Location

Loc Qty

Loc Code

CCK098

14

M130388

14

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Picklist Print

Tuesday, November 15, 2016 12:57:10 PM

Page 3

Work Order ID: 153279

153279

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 11/15/2016

Required Date: 11/29/2016

Start Qty: 1.00

Required Qty: 1.00

601.3005 Manufactured No

Each 4.0000

601 3005

Camloc Retainer - 2600-LW

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK098

4

151173

2

153183

2

**

2

DAS
6
9-89

DAS
27
9-89

NOV 16 2016

601.3006 Purchased No

Each 14.0000

601 3006

Camloc Receptacle - 26R 16-1

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK098

14

M130388

14

**

2

DAS
6
9-89

DAS
27
9-89

NOV 16 2016

601.3011 Manufactured No

f 64.3000

601 3011

P-Seal

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK095

50

91709

50

CCK099

14.3

M130388

14.3

**

1.4

DAS
6
9-89

DAS
27
9-89

NOV 16 2016

CUT AT 16.00"

601.3902

601 3902

Eye Bolt

DAS
28
9-89

Location

Loc Qty

Loc Code

cck101

1

147212

1

**

2

DAS
6
9-89

DAS
27
9-89

NOV 16 2016

Tuesday, November 15, 2016 12:57:10 PM

Shop Packet Print

Page 3

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		

Root Cause				FAULT CATEGORY			
Environment ☐		No Re-verification ☐		Pressure/Forced ☐		Temperature/Cure ☐	
Design ☐		Operator ☐		Bending ☐		Set-up ☐	
Doc/Data ☐		Offset/Setup ☐		Centre Not Concentric ☐		BOM/Route ☐	
Equip/Tooling ☐		Supplier ☐		Cracks ☐		Broken/Damage/Defect ☐	
Handling/Pre ☐		Training ☐		Crimp/Kink/Ripple/Wave ☐		Inspection Incomplete/Unqualified ☐	
Material ☐		Use for Testing ☐		Cuffs ☐		Contamination ☐	
Internal Transport ☐		Poor Information ☐		Crushing ☐		Countersink ☐	
Tribal Knowledge ☐		Rushing ☐		Heat Treat ☐		Cut Too Short ☐	
LOA ☐		Product Improvement ☐		Wave/Twist in Tube ☐		Instructions Incomplete/Unclear ☐	
Substation ☐		Process Improvement ☐		Marks/Chatter ☐		Drill Holes ☐	
Past Expiry Date ☐		Manufacturing Process ☐		OTHER : _____			
Misidentified ☐		Past Due ☐					

Picklist Print

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Work Order ID: 153279

153279

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 11/15/2016

Required Date: 11/29/2016

Start Qty: 1.00

Required Qty: 1.00

647.0112

Manufactured No

Each

79.0000

4

647 0112

Strut Bracket

**

NOV 16 2016 DAS 27 9-89

DAS 28 9-89

Location

Loc Qty

Loc Code

CCK107

54

150114

42

151352

12

CCK108A

25

150895

15

151894

10

647.1601

Manufactured No

Each

3.0000

1

647 1601

Wiper Deflector Aft

**

NOV 16 2016 DAS 27 9-89

DAS 28 9-89

Location

Loc Qty

Loc Code

CCK091

3

148295

1

151482

2

647.1602

Manufactured No

Each

24.0000

1

647 1602

Doubler Assembly

**

NOV 16 2016 DAS 27 9-89

DAS 28 9-89

Location

Loc Qty

Loc Code

CCK107

24

92479

3

M130388

21

647.1610

Manufactured No

Each

17.0000

1

647 1610

Wiper Deflector Fwd

**

NOV 16 2016 DAS 27 9-89

DAS 28 9-89

Location

Loc Qty

Loc Code

CCK091

17

125082

13

M130388

4

Tuesday, November 15, 2016 12:57:10 PM

Shop Packet Print

Page 4

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

Tuesday, November 15, 2016 12:57:10 PM

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Work Order ID: 153279

Parent Item: 647.7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

153279

647 7304

Start Date: 11/15/2016

Required Date: 11/29/2016

Start Qty: 1.00

Required Qty: 1.00

647.1702

647 1702

Skid Deflector Assembly

647.1810

647 1810

Nose Door Doubler

Manufactured

No

JAN 10 2017

Each

0.0000

DAS 6 9-89

Manufactured

No

Each

19.0000

DAS 6 9-89

153191
154422X1
(53324X1)

**

Location

Loc Qty

Loc Code

CCK108

19

92070

6

M130388

13

Manufactured

No

Each

46.0000

**

Location

Loc Qty

Loc Code

CCK108

46

92072

12

93341

1

M130388

33

Manufactured

No

Each

285.0000

**

Location

Loc Qty

Loc Code

CCK107

274

92073

77

M130388

197

CCK108

11

92490

1

93192

10

647.1811

647 1811

Spacer

Manufactured

No

Each

46.0000

**

Location

Loc Qty

Loc Code

CCK108

46

92072

12

93341

1

M130388

33

Manufactured

No

Each

285.0000

**

Location

Loc Qty

Loc Code

CCK107

274

92073

77

M130388

197

CCK108

11

92490

1

93192

10

647.1812

647 1812

Shim

Manufactured

No

Each

285.0000

**

Location

Loc Qty

Loc Code

CCK107

274

92073

77

M130388

197

CCK108

11

92490

1

93192

10

2
153187
153187
1
DAS 6 9-89
DAS 27 9-89
DEC 05 2016
NOV 16 2016

2
DAS 6 9-89
DAS 27 9-89
NOV 16 2016

13
DAS 6 9-89
DAS 27 9-89
NOV 16 2016

2
1
10

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

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Page 6

Work Order ID: 153279

153279

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 11/15/2016

Required Date: 11/29/2016

Start Qty: 1.00

Required Qty: 1.00

647.1814

Manufactured No

Each

33.0000

647 1814

Gusset LH

**

1

NOV 16 2016

DAS

6
9-89

DAS
27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK110

3

106843

3

cck122A

30

92075

6

M130388

24

647.1815

Manufactured No

Each

31.0000

647 1815

Gusset RH

**

1

NOV 16 2016

DAS

6
9-89

DAS
27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK110

7

106681

3

92076

4

cck122A

24

M130388

24

647.1818

Manufactured No

Each

30.0000

647 1818

Nose Door Spacer

**

1

NOV 16 2016

DAS

6
9-89

DAS
27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK110

6

92079

4

93302

2

cck122A

24

M130388

24

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐ _____							

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Work Order ID: 153279

153279

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 11/15/2016

Required Date: 11/29/2016

Start Qty: 1.00

Required Qty: 1.00

647.1913
647 1913
Tee

Manufactured No

Each 18.0000

**

1

NOV 16 2016
DAS 6 27
9-89 9-89

Location

Loc Qty

Loc Code

CCK093

18

114126

3

92229

10

94139

5

647.1914
647 1914
Bracket

Manufactured No

Each 5.0000

**

1

NOV 16 2016
DAS 6 27
9-89 9-89

Location

Loc Qty

Loc Code

CCK110

5

109733

5

647.1915
647 1915
Support Angle

Manufactured No

Each 26.0000

**

1

NOV 16 2016
DAS 6 27
9-89 9-89

Location

Loc Qty

Loc Code

CCK093

26

114127

6

92230

6

93416

3

M130388

11

647.2114
647 2114
Upper U Channel

Manufactured No

Each 4.0000

**

1

NOV 16 2016
DAS 6 27
9-89 9-89

Location

Loc Qty

Loc Code

cck001

4

147224

4

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

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Work Order ID: 153279

153279

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 11/15/2016

Required Date: 11/29/2016

Start Qty: 1.00

Required Qty: 1.00

647.3201

Manufactured No

Each 4.0000

647 3201

Grounding Cable Assembly

**

1

NOV 16 2016

DAS
6
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

cck111

4

123417

4

647.7501

Manufactured No

Each 0.0000

647 7501

Lower Cutter Assembly

**

1

DAS
6
9-89

DAS
27
9-89

647.7701

Manufactured No

Each 0.0000

647 7701

Strut Assembly

**

2

DAS
6
9-89

DAS
27
9-89

647.7702

Manufactured No

Each 3.0000

647 7702

Strut Assembly

**

2

DAS
6
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

CCK076

3

140723

3

647.7819

Manufactured No

Each 10.0000

647 7819

Cross Bracket Fwd

**

1

DAS
6
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

CCK115

10

130656

1

M130388

9

NOV 16 2016

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step # : _____		QTY Effective : _____			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		FAULT CATEGORY Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐					
		OTHER : _____							

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Work Order ID: 153279

153279

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 11/15/2016

Required Date: 11/29/2016

Start Qty: 1.00

Required Qty: 1.00

647.7821

Manufactured No

Each

12.0000

647 7821

Eye Bolt Fitting LH

**

1

NOV 16 2016

DAS 6 27 9-89

DAS 28 9-89

Location

Loc Qty

Loc Code

CCK115

3

121378

3

CCK121

9

130388

7

M130388

2

647.7822

Manufactured No

Each

9.0000

647 7822

Eye Bolt Fitting RH

**

1

NOV 16 2016

DAS 6 27 9-89

DAS 28 9-89

Location

Loc Qty

Loc Code

CCK115

3

123827

3

CCK121

6

M130388

6

647.7823

Manufactured No

Each

4.0000

647 7823

Cross Bracket Aft

**

1

NOV 16 2016

DAS 6 27 9-89

DAS 28 9-89

Location

Loc Qty

Loc Code

cck086

4

146665

4

647.7910

Manufactured No

Each

6.0000

647 7910

Angle Bracket

**

2

NOV 16 2016

DAS 6 27 9-89

DAS 28 9-89

Location

Loc Qty

Loc Code

CCK115

6

93329

6

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
						QC / QA Coordinator Approval			

Root Cause				FAULT CATEGORY			
Environment ☐	☐	No Re-verification ☐	☐	Pressure/Forced ☐	☐	Temperature/Cure ☐	☐
Design ☐	☐	Operator ☐	☐	Bending ☐	☐	Set-up ☐	☐
Doc/Data ☐	☐	Offset/Setup ☐	☐	Centre Not Concentric ☐	☐	BOM/Route ☐	☐
Equip/Tooling ☐	☐	Supplier ☐	☐	Cracks ☐	☐	Broken/Damage/Defect ☐	☐
Handling/Pre ☐	☐	Training ☐	☐	Crimp/Kink/Ripple/Wave ☐	☐	Inspection Incomplete/Unqualified ☐	☐
Material ☐	☐	Use for Testing ☐	☐	Cuffs ☐	☐	Contamination ☐	☐
Internal Transport ☐	☐	Poor Information ☐	☐	Crushing ☐	☐	Countersink ☐	☐
Tribal Knowledge ☐	☐	Rushing ☐	☐	Heat Treat ☐	☐	Cut Too Short ☐	☐
LOA ☐	☐	Product Improvement ☐	☐	Wave/Twist in Tube ☐	☐	Instructions Incomplete/Unclear ☐	☐
Substation ☐	☐	Process Improvement ☐	☐	Marks/Chatter ☐	☐	Drill Holes ☐	☐
Past Expiry Date ☐	☐	Manufacturing Process ☐	☐	OTHER : _____			
Misidentified ☐	☐	Past Due ☐	☐				

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Work Order ID: 153279

153279

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 11/15/2016

Required Date: 11/29/2016

Start Qty: 1.00

Required Qty: 1.00

647.7911
647 7911
Bracket

Manufactured No

Each 15.0000

**

2
NOV 16 2016
DAS 6 27
9-89 9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK115

15

93383

1

MT30388

14

647.7912
647 7912
Clip

Manufactured No

Each 12.0000

**

4
NOV 16 2016
DAS 6 27
9-89 9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK115

12

93312

12

647.7913
647 7913
Doubler

Manufactured No

Each 6.0000

**

2
NOV 16 2016
DAS 6 27
9-89 9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK115

6

93270

6

647.7914
647 7914
Bracket

Manufactured No

Each 5.0000

**

1
NOV 16 2016
DAS 6 27
9-89 9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK115

5

93215

2

MT30388

3

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

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Work Order ID: 153279

153279

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 11/15/2016

Required Date: 11/29/2016

Start Qty: 1.00

Required Qty: 1.00

647.7915
647 7915
Bracket

Manufactured No

Each 14.0000

1

DAS 6 27
9-89 9-89

NOV 16 2016

Location

Loc Qty

Loc Code

cck116

14

93301

1

M130388

13

647.7916
647 7916
Bracket

Manufactured No

Each 22.0000

2

NOV 16 2016

DAS 6 27
9-89 9-89

Location

Loc Qty

Loc Code

cck116

22

93287

2

M130388

20

647.7917
647 7917
Bracket

Manufactured No

Each 18.0000

1

NOV 16 2016

DAS 6 27
9-89 9-89

Location

Loc Qty

Loc Code

cck116

18

131356

14

93254

1

M130388

3

647.7918
647 7918
Bracket

Manufactured No

Each 16.0000

1

NOV 16 2016

DAS 6 27
9-89 9-89

Location

Loc Qty

Loc Code

cck116

16

119630

12

93385

1

M130388

3

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

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Work Order ID: 153279

153279

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 11/15/2016

Required Date: 11/29/2016

Start Qty: 1.00

Required Qty: 1.00

647.7919 Manufactured No

Each 3.0000

647 7919

Shim

DAS
28
9-89

Location

Loc Qty

Loc Code

cck116

3

93337

3

Each

60.0000

647.8510

Manufactured No

647 8510

Insert

DAS
28
9-89

Location

Loc Qty

Loc Code

cck116

60

M130388

60

Each

0.0000

647.8511

Manufactured No

647 8511

Insert

DAS
28
9-89

Manufactured No

647.8512

Manufactured No

647 8512

Insert

DAS
28
9-89

Location

Loc Qty

Loc Code

cck116

14

M130388

14

Each

30.0000

93635A212

Purchased No

93635A212

Bolt

DAS
28
9-89

Location

Loc Qty

Loc Code

ST558

30

m134700

30

1

**

NOV 16 2016
NOV 16 2016

DAS
27
9-89

20

**

NOV 16 2016

DAS
27
9-89

20

4

**

B153197

DEC 12 2016

DAS
27
9-89

2

**

NOV 16 2016

DAS
27
9-89

2

4

**

NOV 16 2016

DAS
6
9-89

DAS
27
9-89

4

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition				Completed By																	
								Lead hand / Supervisor Approval Verification																	
								QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			OTHER : ☐																	

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Page 13

Work Order ID: 153279

153279

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 11/15/2016

Required Date: 11/29/2016

Start Qty: 1.00

Required Qty: 1.00

AN3-11A *AN3-11A* Bolt	Purchased	No	Each	96.0000	**	4	NOV 16 2016	DAS 27 9-89
		<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>				
		ST349	96					
		m135390	2					
		m135767	94					
AN316C4R *AN316C4R* Nut, Jam	Purchased	No	Each	13.0000	**	4	NOV 16 2016	DAS 27 9-89
		<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>				
		ST331	13					
		m135840	13					
AN3-4A *AN3-4A* Bolt	Purchased	No	Each	221.0000	**	2	NOV 16 2016	DAS 27 9-89
		<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>				
		ST350	221					
		m135704	221					
AN44-12A *AN44-12A* Eyebolt	Purchased	No	Each	22.0000	**	2	NOV 16 2016	DAS 27 9-89
		<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>				
		ST339	22					
		124131	2					
		124263	20					

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : _____					

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Work Order ID: 153279

153279

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 11/15/2016

Required Date: 11/29/2016

Start Qty: 1.00

Required Qty: 1.00

AN4C7A Purchased No Each 96.0000

AN4C7A

BOLT

DAS
28
9-89

**

4

NOV 16 2016 DAS 27 9-89

Location Loc Qty Loc Code

OVER002 70

m135864 70

ST345 26

m135470 26

AN4CH6A Purchased No Each 40.0000

AN4CH6A

Bolt

DAS
28
9-89

**

1

NOV 16 2016 DAS 27 9-89

Location Loc Qty Loc Code

ST345 40

123525 20

m126176 20

AN665-34R Purchased No Each 23.0000

AN665-34R

Clevis

DAS
28
9-89

**

4

NOV 16 2016 DAS 27 9-89

Location Loc Qty Loc Code

ST330 23

M135603 3

M135948 20

CCR264SS-3-03 Purchased No Each 118.0000

CCR264SS-3-03

Cherry Rivet

DAS
28
9-89

**

24

NOV 16 2016 DAS 27 9-89

Location Loc Qty Loc Code

LG001 87

m128606 25

m134023 62 23

ST321 31

m135127 31

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DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

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Work Order ID: 153279

153279

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 11/15/2016

Required Date: 11/29/2016

Start Qty: 1.00

Required Qty: 1.00

CCR274SS-3-03

Purchased

No

Each

109.0000

4

CCR274SS-3-03

Rivet

DAS
28
9-89

Location

Loc Qty

Loc Code

ST321

109

123785

109

Each

91.0000

4

CR3212-5-6

Purchased

No

CR3212-5-6

Cherry Rivet

OK

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK003

91

124259

91

Each

287.0000

4

CR3213-4-2

Purchased

No

CR3213-4-2

Cherry Rivet

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK003

100

m135979

100

over003

100

m135704

100

ST320

87

m134058

87

4

2
M120933

4

4

NOV 16 2016

DAS
27
9-89
6
9-89

NOV 16 2016

DAS
27
9-89
6
9-89

NOV 16 2016

DAS
27
9-89
6
9-89

DAS
6
9-89

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DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐ Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐		FAULT CATEGORY Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

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Work Order ID: 153279

153279

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 11/15/2016

Required Date: 11/29/2016

Start Qty: 1.00

Required Qty: 1.00

CR3213-4-3

Purchased

No

Each

385.0000

24

CR3213-4-3

Rivet, Cherry

**

NOV 16 2016

DAS 6 27
9-89 9-89

Location

Loc Qty

Loc Code

CCK003

300

m135470

100

m136042

200

ST319

85

m131340

10

m135135

75

27

Each

239.0000

16

CR3213-4-4

Purchased

No

CR3213-4-4

Rivet, Cherry

**

NOV 16 2016

DAS 6 27
9-89 9-89

Location

Loc Qty

Loc Code

ST319

239

M135536

239

16

Each

225.0000

8

CR3213-4-5

Purchased

No

CR3213-4-5

Rivet

**

NOV 16 2016

DAS 6 27
9-89 9-89

Location

Loc Qty

Loc Code

CCK003

100

M129913

100

ST319

125

M129913

125

DAS 28
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

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Work Order ID: 153279

153279

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 11/15/2016

Required Date: 11/29/2016

Start Qty: 1.00

Required Qty: 1.00

CR3213-4-6

Purchased

No

Each

213.0000

17

CR3213-4-6

Rivet

**

NOV 16 2016

DAS 27
6 9-89

Location

Loc Qty

Loc Code

CCK003

100

M135978

100

ST319

113

M131800

113

DAS 28
9-89

CR3213-5-3

Purchased

No

Each

161.0000

16

CR3213-5-3

Cherry Rivet

**

NOV 16 2016

DAS 27
6 9-89

Location

Loc Qty

Loc Code

CCK003

100

m135865

100

ST319

61

m135408

61

DAS 28
9-89

CR3213-5-4

Purchased

No

Each

265.0000

12

CR3213-5-4

Cherry Rivet

**

NOV 16 2016

DAS 27
6 9-89

Location

Loc Qty

Loc Code

CCK004

200

m128179

100

m128199

100

ST319

53

123785

53

WA003

12

117543

12

DAS 28
9-89

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

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Work Order ID: 153279

153279

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 11/15/2016

Required Date: 11/29/2016

Start Qty: 1.00

Required Qty: 1.00

CR3522-4-3

Purchased

No

Each

108.0000

8

CR3522-4-3

Rivet

**

DAS 6 27 9-89

NOV 16 2016

Location

Loc Qty

Loc Code

ST318

108

124876

100

m130388

8

8

CR3522-5-3

Purchased

No

Each

0.0000

8

CR3522-5-3

Rivet

**

DAS 6 27 9-89

NOV 22 2016

CR3523-4-3

Purchased

No

Each

80.0000

4

CR3523-4-3

Rivet

**

DAS 6 27 9-89

NOV 16 2016

Location

Loc Qty

Loc Code

ST317

80

m129764

80

Each

186.0000

24

CR3523-4-4

Purchased

No

CR3523-4-4

Rivet

**

DAS 6 27 9-89

NOV 16 2016

Location

Loc Qty

Loc Code

CCK003

100

m127255

100

ST318

86

124259

84

m130388

2

22

CR3523-5-3

Purchased

No

Each

76.0000

8

CR3523-5-3

Rivet

**

DAS 6 27 9-89

NOV 16 2016

Location

Loc Qty

Loc Code

ST317

76

m134962

76

8

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐ Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐		FAULT CATEGORY Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

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Work Order ID: 153279

153279

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 11/15/2016

Required Date: 11/29/2016

Start Qty: 1.00

Required Qty: 1.00

LN9025-0820K

Purchased

No

Each

12.0000

I N9025-0820K

Lock Tab Washer

DAS
28
9-89

Location

Loc Qty

Loc Code

ST564

12

m136136

12

Each

4.0000

LN9037-08018

Purchased

No

I N9037-08018

Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

ST564

4

m136136

4

Each

0.0000

MS21042-08

MS21042L08

Purchased

No

MS21042-08

USE MS21042L08

DAS
28
9-89

MS21042-3

MS21042L3

Purchased

No

MS21042-3

Nut

DAS
28
9-89

MS21042L08

Purchased

No

MS21042L08

Nut

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

50

m135274

50

ST303

960

m135672

1

m135766

159

m135948

300

m135978

500

**

NOV 16 2016

DAS
6
9-89

DAS
27
9-89

**

NOV 16 2016

DAS
6
9-89

DAS
27
9-89

**

NOV 16 2016

DAS
6
9-89

DAS
27
9-89

**

NOV 16 2016

DAS
27
9-89

**

NOV 16 2016

DAS
6
9-89

DAS
27
9-89

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

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Work Order ID: 153279

153279

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 11/15/2016

Required Date: 11/29/2016

Start Qty: 1.00

Required Qty: 1.00

MS21042L4

Purchased

No

Each

1,964.000

4

MS21042L4

Nut

**

DAS
6
9-89

DAS
27
9-89

NOV 16 2016

Location

Loc Qty

Loc Code

FP001

34

m133363

34

GA

204

m135058

204

OVER007

500

m135979

500

ST303

1226

m135774

226

m135864

1000

4

MS21042L5

Purchased

No

Each

486.0000

4

MS21042L5

Nut

**

DAS
6
9-89

DAS
27
9-89

NOV 16 2016

Location

Loc Qty

Loc Code

GA

25

m127813

25

OVER007

200

m136047

200

ST303

261

m135297

91

m135544

100

m135774

70

4

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DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step # : _____		QTY Effective : _____			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

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Work Order ID: 153279

153279

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 11/15/2016

Required Date: 11/29/2016

Start Qty: 1.00

Required Qty: 1.00

MS21047-3

Purchased

No

Each

185.0000

12

MS21047-3

Nut Plate

**

NOV 16 2016

DAS 6 27 9-89

Location

Loc Qty

Loc Code

ST301

185

m135603

5

m135774

90

m136047

90

DAS 28 9-89

6 6

MS21266-2N

Purchased

No

Each

47.0000

1

MS21266-2N

Grommet

**

NOV 16 2016

DAS 6 27 9-89

Location

Loc Qty

Loc Code

ST294

47

123900

40

M130388

7

DAS 28 9-89

1

MS24694-S54

Purchased

No

Each

198.0000

5

MS24694-S54

SCREW

**

NOV 16 2016

DAS 6 27 9-89

Location

Loc Qty

Loc Code

ST284

198

m135672

13

m135948

185

DAS 28 9-89

5

MS27039-08-07

Purchased

No

Each

100.0000

1

MS27039-08-07

SCREW

**

NOV 16 2016

DAS 6 27 9-89

Location

Loc Qty

Loc Code

ST278

100

m132035

100

DAS 28 9-89

1

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			Completed By
3		3			Lead hand / Supervisor Approval Verification
					QC / QA Coordinator Approval
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : _____	

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Page 22

Work Order ID: 153279

153279

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 11/15/2016

Required Date: 11/29/2016

Start Qty: 1.00

Required Qty: 1.00

MS27039-08-13

Purchased

No

Each

72.0000

4

MS27039-08-13

Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

ST278

72

124326

72

Each

291.0000

5

MS27039-08-19

Purchased

No

MS27039-08-19

Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

182

m135948

182

ST277

109

m135865

9

m136042

100

Each

181.0000

3

MS27039-1-07

Purchased

No

MS27039-1-07

Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

2

125654

2

ST281

179

m135948

179

DAS
6
9-89
7
89

NOV 16 2016

DAS
6
9-89
27
89

NOV 16 2016

DAS
6
9-89
27
89

NOV 16 2016

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
				Completed By					
				Lead hand / Supervisor Approval Verification					
				QC / QA Coordinator Approval					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

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Page 23

Work Order ID: 153279

153279

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 11/15/2016

Required Date: 11/29/2016

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-09

Purchased

No

Each

255.0000

12

DAS
6
9-89

DAS
27
9-89

MS27039-1-09

Screw

NOV 16 2016

Location

Loc Qty

Loc Code

FP001

34

18057

34

GA

50

124859

50

ST280

171

m125646

13

m125654

53

m135056

105

12

DAS
28
9-89

MS27039-1-10

Purchased

No

Each

471.0000

6

DAS
6
9-89

DAS
27
9-89

MS27039-1-10

SCREW

NOV 16 2016

Location

Loc Qty

Loc Code

GA

17

m129541

17

over006

300

m135774

300

ST280

154

m135603

154

6

DAS
28
9-89

MS27039-1-12

Purchased

No

Each

71.0000

2

DAS
6
9-89

DAS
27
9-89

MS27039-1-12

Screw

NOV 16 2016

Location

Loc Qty

Loc Code

ST280

71

m135566

71

2

DAS
28
9-89

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

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Work Order ID: 153279

153279

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 11/15/2016

Required Date: 11/29/2016

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-14

Purchased

No

Each

706.0000

4

MS27039-1-14

Screw

**

NOV 16 2016

DAS
6
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

94

120449

94

over006

500

124326

500

ST280

112

124326

112

MS27039-1-15

Purchased

No

Each

93.0000

1

MS27039-1-15

Screw

**

NOV 16 2016

DAS
6
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

5

m127916

5

ST280

88

m134852

88

MS27039-1-16

Purchased

No

Each

122.0000

4

MS27039-1-16

Screw

**

NOV 16 2016

DAS
27
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

over006

100

m135865

100

ST280

22

m135566

22

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

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Work Order ID: 153279

153279

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 11/15/2016

Required Date: 11/29/2016

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-17

Purchased

No

Each

167.0000

2

MS27039-1-17

Screw (601.1954)

**

NOV 16 2016

DAS 6 9-89

DAS 27 9-89

DAS 28 9-89

Location

Loc Qty

Loc Code

GA

150

m127831

150

ST280

17

120142

17

Each

1,676.000

2

MS27039-1-18

Purchased

No

MS27039-1-18

Screw

**

NOV 16 2016

DAS 6 9-89

DAS 27 9-89

DAS 28 9-89

Location

Loc Qty

Loc Code

GA

245

123522

45

124326

200

over006

1200

124326

1200

ST280

231

124326

231

Each

1,167.000

12

NAS1149C0432R

Purchased

No

NAS1149C0432R

WASHER

**

NOV 16 2016

DAS 6 9-89

DAS 27 9-89

DAS 28 9-89

Location

Loc Qty

Loc Code

GA

373

m134676

373

ST266

794

m135979

794

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step # : _____		QTY Effective : _____			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
				Completed By _____					
				Lead hand / Supervisor Approval Verification					
				QC / QA Coordinator Approval					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Tuesday, November 15, 2016 12:57:12 PM

Page 26

Work Order ID: 153279

153279

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 11/15/2016

Required Date: 11/29/2016

Start Qty: 1.00

Required Qty: 1.00

NAS1149F0332P

Purchased

No

Each

2,610.000

89

NAS1149F0332P

Washer

**

NOV 16 2016

DAS 6 27
9-89 9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

343

m133709

343

ST262

2267

m135544

267

m135948

2000

89

NAS1149F0532P

Purchased

No

Each

1,641.000

4

NAS1149F0532P

Washer

**

NOV 16 2016

DAS 6 27
9-89 9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

ST260a

600

m133725

600

ST262

1041

18057

1041

Each

1,463.000

25

NAS1149FN832P

Purchased

No

NAS1149FN832P

Washer

**

NOV 16 2016

DAS 27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

1285

M135058

1285

ST263

178

M135603

178

25

Tuesday, November 15, 2016 12:57:12 PM

Shop Packet Print

Page 26

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐					
		OTHER : _____							

Picklist Print

Tuesday, November 15, 2016 12:57:12 PM

Page 27

Work Order ID: 153279

153279

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 11/15/2016

Required Date: 11/29/2016

Start Qty: 1.00

Required Qty: 1.00

NAS6603-12

Purchased

No

Each

136.0000

4

NAS6603-12

Bolt

**

NOV 16 2016

DAS 6 9-89

DAS 27 9-89

DAS 28 9-89

Location

Loc Qty

Loc Code

st552

136

123900

124

m130388

12

NAS6603-16

Purchased

No

Each

81.0000

4

NAS6603-16

Bolt

**

NOV 16 2016

DAS 6 9-89

DAS 27 9-89

DAS 28 9-89

Location

Loc Qty

Loc Code

st552

81

m128199

19

m130388

12

m133523

50

Tuesday, November 15, 2016 12:57:12 PM

Shop Packet Print

Page 27

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

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NOTES: UNLESS OTHERWISE SPECIFIED

1. AFTER INSTALLATION, APPLY F/N 90 A/R TO FILL GAPS AND FILLET EDGES.

2. APPLY F/N 91 TO FAYING SURFACES.

3. DELETED.

4. MATCH DRILL HOLES THROUGH F/N 26 or F/N 98 AND FUSELAGE.

5. SHIM GAP BETWEEN F/N 1 & 26 AS NEEDED.

6. AT CUSTOMERS OPTION, INSTALL F/N 96 BY MATCH DRILLING ONTO F/N 1 FOR KIT P/N 647.7301 or F/N 99 FOR KIT P/N 647.7304.

7. 647.7301 INSTALLATION FOR EC135.

8. 647.7304 INSTALLATION FOR EC135 T2/P2.

9. EXCEPT WHERE NOTED, INSTALLATION FOR 647.7304 AND 647.7307 SAME AS 647.7301.

10. CUT LENGTH: 16 INCHES.

11. INSTALLATION FOR 647.7307 AND 647.7304 ARE IDENTICAL EXCEPT 647.1405 (F/N 111) REPLACES 647.1404 (F/N 99).

12. DETAIL W REFLECTS THE UNIQUE 647.1405 ASSEMBLY (F/N 111) USED ON 647.7307 THAT REPLACES 647.1404 (F/N 99) ON 647.7304.

13. ADDITIONAL KITS FOR SUB-ASSEMBLIES OF THE 647.7301, 647.7304, AND 647.7307 ASSEMBLIES ARE DEFINED BY MPP-195

SHOP COPY
RETURN TO
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UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

NO. 153299 MJS
16-11-15

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
	LAST PROTOTYPE REVISION: P84		N/C
N/C	INITIAL RELEASE	01/13/09	P. BRAVO
A	INCORPORATED ECNS 03038, 03002, 03044, 03064	02/14/11	P. BRAVO
B	INCORPORATED ECN 05325	03/09/16	P. BRAVO
C	INCORPORATED ECN 05556, 05445	11/01/16	P. BRAVO

4	4	4	50	601.3130	BOLT	NAS6603-16	
4	4	4	49	601.1500	BOLT	NAS6603-12	
4	4	4	48	601.2669	BOLT	ANMC7A	
1	1	1	47	601.1324	BOLT	ANACH6A	
4	4	4	46	601.2826	BOLT	AN3-11A	
2	2	2	45	601.2823	BOLT	AN3-4A	
12	12	12	44	600.0795	NUTPLATE	MS21047-3	
2	2	2	43	601.3004	CAMLOC STUD		
2	2	2	42	601.3005	CAMLOC RETAINER		
2	2	2	41	601.3006	CAMLOC RECEPTACLE		
4	4	4	40	601.3119	CLEVIS	AN665-34R	
2	2	2	39	601.3120	EYE BOLT	AN44-12A	
			38	601.3121	EYE BOLT	AN44-5A	
1	1	1	37	601.3007	GROMMET	MS2-266-2N	
A/R	A/R	A/R	36	601.3011	P-SEAL		
1	1	1	35	647.3201	GROUNDING CABLE ASSY		
			4	647.2511	NUT		
			4	647.2510	SLEEVE		
13	13	13	32	647.1812	SHIM		
2	2	2	31	647.1811	SPACER		
1	1	1	30	647.1602	DOUBLER ASSY		
1	1	1	29	647.1914	BRACKET		
1	1	1	28	647.7822	EYE BOLT FITTING RH		
1	1	1	27	647.7821	EYE BOLT FITTING LH		
			1	647.7818	MOUNTING CHANNEL		
7307	7304	7301	FIND #	PART #	DESCRIPTION	MAT'L	SPEC

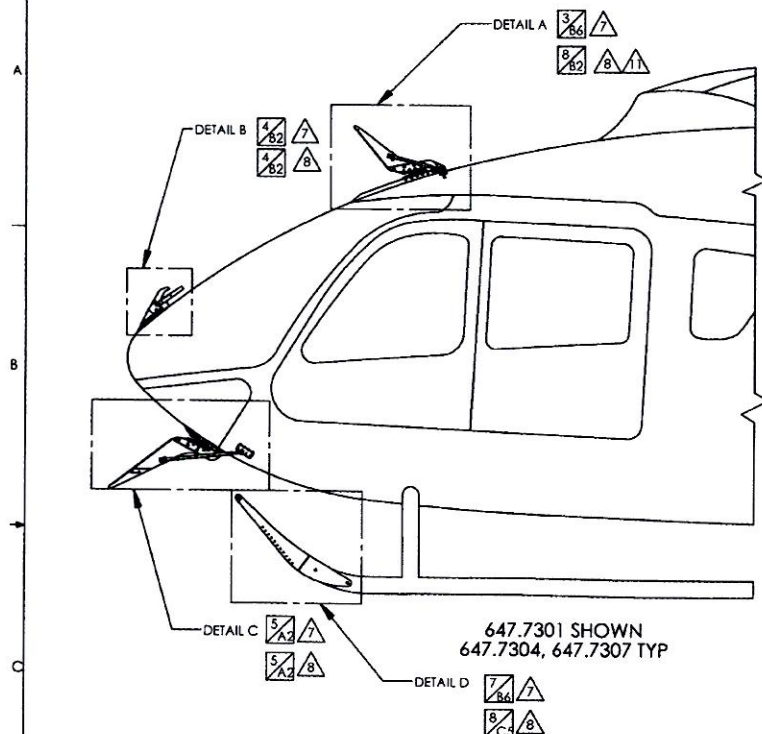
			1	25	647.7820	CROSS BRACKET AFT		
1	1	1	24	647.7819	CROSS BRACKET FWD			
1	1	1	23	647.7918	BRACKET			
1	1	1	22	647.7917	BRACKET			
2	2	2	21	647.7916	BRACKET			
1	1	1	20	647.7915	BRACKET			
1	1	1	19	647.7914	BRACKET			
2	2	2	18	647.7913	DOUBLER			
4	4	4	17	647.7912	CLIP			
2	2	2	16	647.7911	BRACKET			
2	2	2	15	647.7910	ANGLE BRACKET			
4	4	4	14	647.0112	STRUT BRACKET			
1	1	1	13	647.1810	NOSE DOOR DOUBLER			
1	1	1	12	647.1818	NOSE DOOR SPACER			
2	2	2	11	647.7701	STRUT ASSY			
2	2	2	10	647.7702	STRUT ASSY			
1	1	1	9	647.1815	GUSSET, RH			
1	1	1	8	647.1814	GUSSET, LH			
1	1	1	7	647.1915	SUPPORT ANGLE			
1	1	1	6	647.1913	TEE			
1	1	1	5	647.1610	WIPER DEFLECTOR, FWD			
1	1	1	4	647.1601	WIPER DEFLECTOR ASSY, AFT			
			2	3	647.1701	SKID DEFLECTOR ASSY		
1	1	1	2	647.7501	LOWER CUTTER ASSY			
			1	1	647.7401	UPPER CUTTER ASSY		
X					647.7307	EC135 T3/P3 CABLE CUTTERS KIT		△△
					647.7306	T2/P2 REMOVABLE PROVISIONS KIT		△△
					647.7305	T2/P2 FIXED PROVISIONS KIT		△△
	X				647.7304	EC135 T2/P2 CABLE CUTTERS KIT		△△
					647.7303	T1/P1 REMOVABLE PROVISIONS KIT		△△
					647.7302	T1/P1 FIXED PROVISIONS KIT		△△
		X			647.7301	EC135 T1/P1 CABLE CUTTERS KIT		△△
7307	7304	7301	FIND	PART #	DESCRIPTION	MAT'L	SPEC	

QTY	1	ORIGINAL DATE (MM/DD/YY)	11/24/09
NEXT ASSY (S)		DRAWN BY	03ECCBP
		A. CHAN	03ECCBP
		DRAWING APPROVAL	P. BRAVO
		DATE	11/13/09
		CONTRACT NO.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES 2 PLACE DECIMALS ±.01 ANGLES ±.5°			
SEE	CAGE CODE	DWG. NO.	REV.
B	07M26	647.7300	C
SCALE		SHEET 1 OF 6	

DART 3030 ENTERPRISE CT., SUITE A
VISTA, CA. 92081
(760)-724-5300
APCAL INDUSTRIES, INC.
DBA DART AEROSPACE

EC135 CABLE CUTTERS KIT

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647.7301 SHOWN
647.7304, 647.7307 TYP

1			111	647.1405	CUTTER ASSY (UPPER)		
2	2		110	601.3902	EYE BOLT		
2	2		109	601.2910	SCREW	MS27039-1-18	
4	4		108	601.3963	BOLT	93A35A212	
8	8		107	601.3654	BOLT	UN9037-08C16	
8	8		106	601.3655	LOCK WASHER	UN9025-0820K	
2	2		105	647.1702	SKID DEFLECTOR ASSY		
8	8	8	104	601.3214	CHERRY RIVET	CR3213-5-3	
24	24	24	103	601.3213	CHERRY RIVET	CR3213-4-4	
4	4	4	102	601.3212	CHERRY RIVET	CR3213-4-3	
5	5		101	601.1541	LOCKNUT	MS21042-08	
5	5		100	601.2765	SCREW	MS27039-0819	
1	1		98	647.2114	UPPER U CHANNEL		
1	1		97	647.7823	CROSS BRACKET AFI		
1	1	1	96	647.5701	GPS MOUNT KIT		
7307	7304	7301	FIND #	PART #	DESCRIPTION	MATL	SPEC

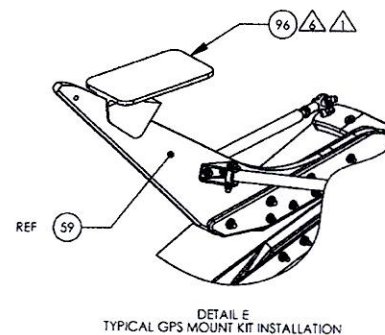
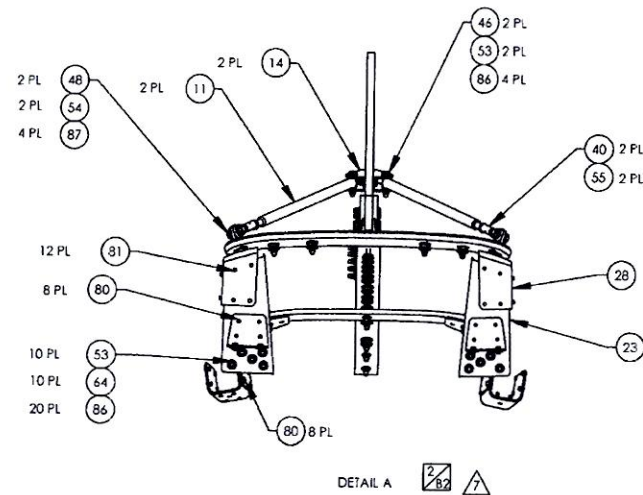
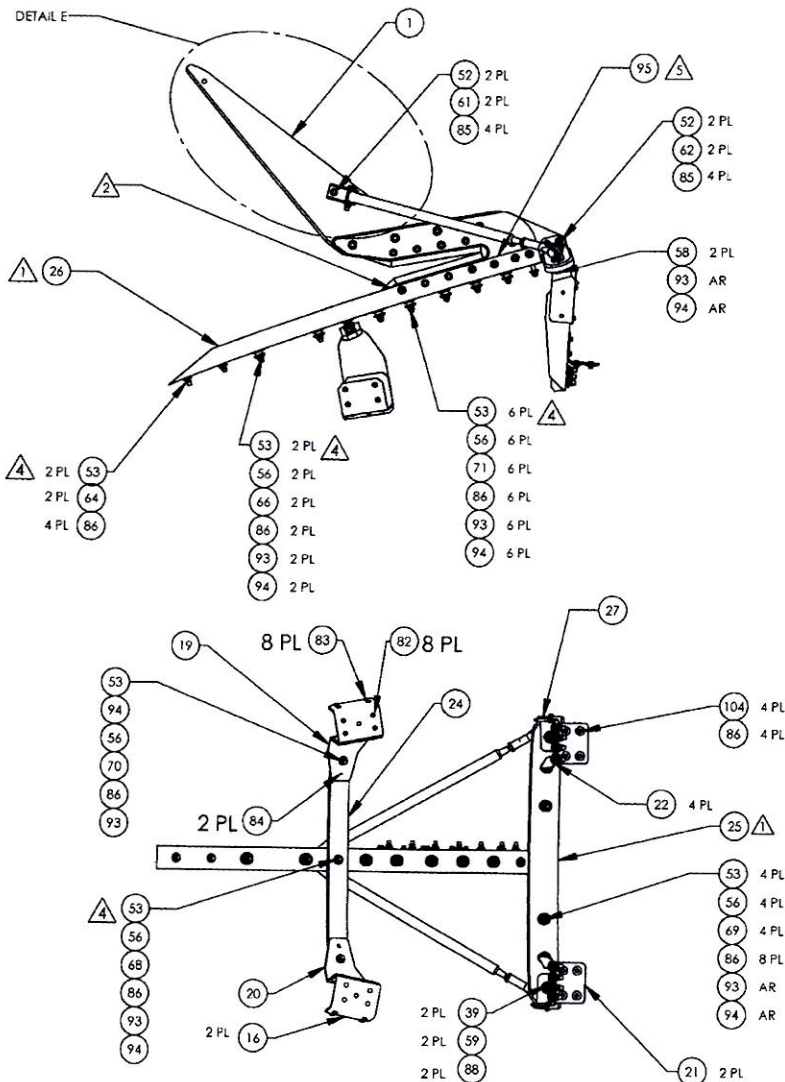
		8	95	601.1097	WASHER	NAS114990463P	
		1	94	647.7919	SHIM		
A/R	A/R	A/R	93	600.0990	MAGNOBOND 6398 PART A		
A/R	A/R	A/R	92	600.0991	MAGNOBOND 6398 PART B		
A/R	A/R	A/R	91	601.2045	RIV	LOCITE 298	
A/R	A/R	A/R	90	600.1012	SEALANT	PR-1425 CLASS B	
3	3	3	89	601.2375	WASHER		
4	4	4	88	601.3126	WASHER	NAS114990532P	
12	12	8	87	601.3663	WASHER	NAS1149C0432R	
89	89	86	86	601.1607	WASHER	NAS1149F0332P	
25	25	14	85	601.2764	WASHER	NAS1149F0832P	
2	2	2	84	601.3136	CHERRY RIVET	CR3213-5-6	
8	8	8	83	601.3215	CHERRY RIVET	CR3213-5-3	
8	8	8	82	601.3216	CHERRY RIVET	CR3213-4-3	
12	12	12	81	601.2481	CHERRY RIVET	CR3213-5-4	
16	16	16	80	601.2020	CHERRY RIVET	CR3213-5-3	
17	17	17	79	601.2991	CHERRY RIVET	CR3213-4-6	
8	8	8	78	601.1183	CHERRY RIVET	CR3213-4-5	
16	16	16	77	601.1915	CHERRY RIVET	CR3213-4-4	
24	24	24	76	601.0790	CHERRY RIVET	CR3213-4-3	
4	4	4	75	601.1604	CHERRY RIVET	CR3213-4-2	
4	4	4	74	601.1983	NUTPLATE RIVET	CCR27455-3-03	
24	24	24	73	601.2207	NUTPLATE RIVET	CCR26455-3-03	
3	3	3	72	601.2999	SCREW		
5	5	6	71	601.2829	SCREW	MS24694554	
2	2	2	70	601.1954	SCREW	MS27039-1-17	
4	4	4	69	601.2637	SCREW	MS27039-1-16	
1	1	1	68	601.3012	SCREW	MS27039-1-15	
4	4	4	67	601.1622	SCREW	MS27039-1-14	
2	2	2	66	601.1953	SCREW	MS27039-1-12	
6	6	6	65	601.1365	SCREW	MS27039-1-10	
12	12	12	64	601.3069	SCREW	MS27039-1-09	
3	3	3	63	601.2198	SCREW	MS27039-1-07	
		2	62	601.3137	SCREW	MS27039-0816	
4	4	4	61	601.2988	SCREW	MS27039-0813	
1	1	1	60	601.2525	SCREW	MS27039-0807	
4	4	4	59	601.3127	LOCKNUT	MS21042L5	
2	2	2	58	647.8512	INSERT		
4	4	4	57	647.8511	INSERT		
20	20	18	56	647.8510	INSERT		
4	4	4	55	601.3128	NUT	AN316C4R	
4	4	8	54	601.3209	LOCKNUT	MS21042L4	
35	35	34	53	601.2943	LOCKNUT	MS21042-3	
5	5	7	52	601.2973	LOCKNUT	MS21042-08	
		4	51	601.3002	BOLT	NAS56604-66	
7307	7304	7301	FIND #	PART #	DESCRIPTION	MATL	SPEC

ORIGINAL DATE
11/04/97
DRAWN BY
A. GUAN
CHECKED
D. BARKER
DRAWING APPROVAL
E. HAYES
CONTRACT NO.

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
2 PLACE DECIMALS ±.01
3 PLACE DECIMALS ±.005
ANGLES ±.1°

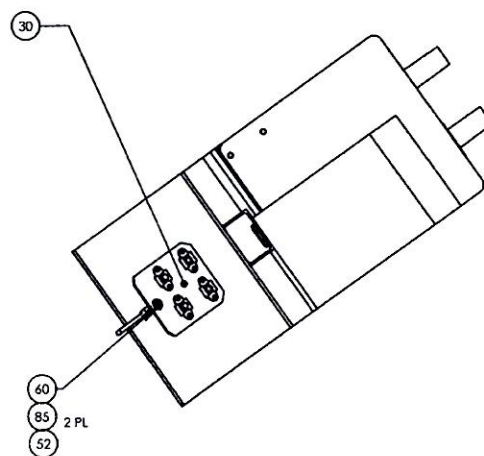
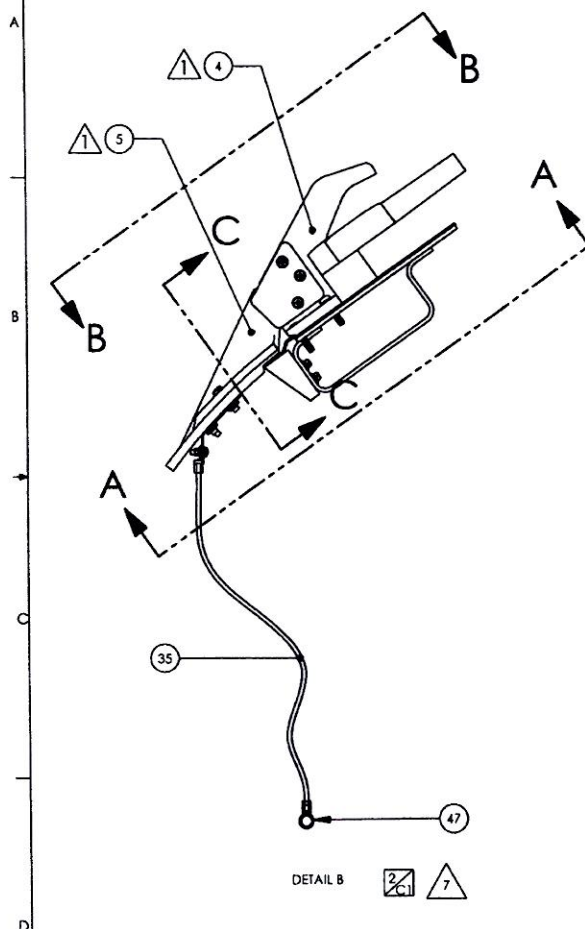
DART
AEROSPACE
APICAL INDUSTRIES INC.
DBA DART AEROSPACE
3030 ENTERPRISE CT.,
SUITE A
VISTA, CA 92081
(760) 724-5300
EC135 CABLE CUTTERS KIT
REV. C
SCALE: NONE
SHEET 2 OF 8

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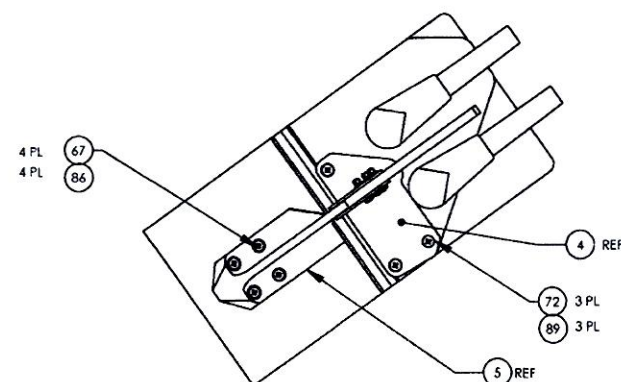


ORIGINAL DATE 11/24/09		3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760)-724-5300	
DESIGNED BY A. GUAN	CHECKED BY D. BARKER	DART AEROSPACE APICAL INDUSTRIES INC. DBA DART AEROSPACE	
DRAWING APPROVAL D. BRAY 07/21/10		EC135 CABLE CUTTERS KIT	
CONTRACT NO.		SFF B	REV C
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		DWG. NO. 647,7300	SCALE NONE
		SHEET 3 OF 8	

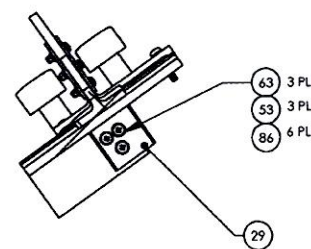
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SECTION A-A



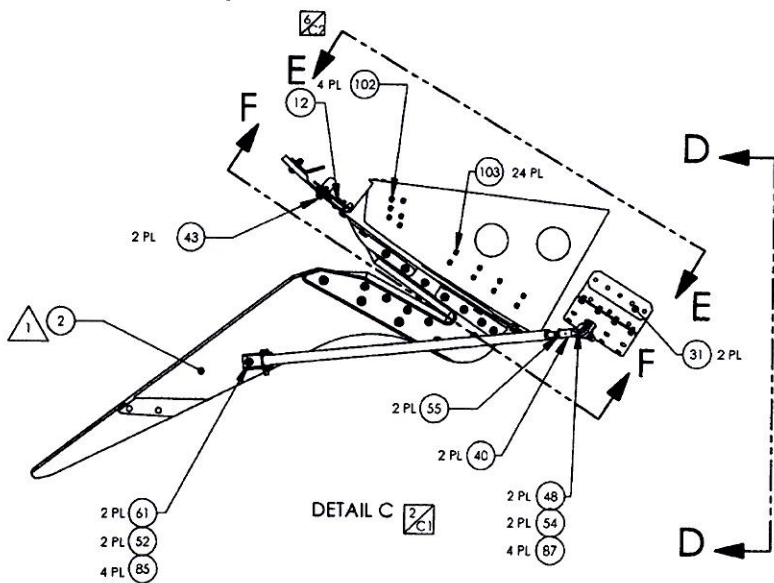
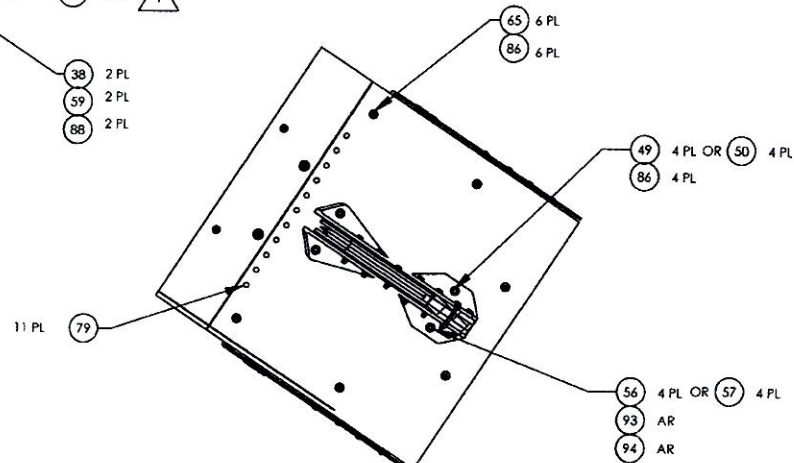
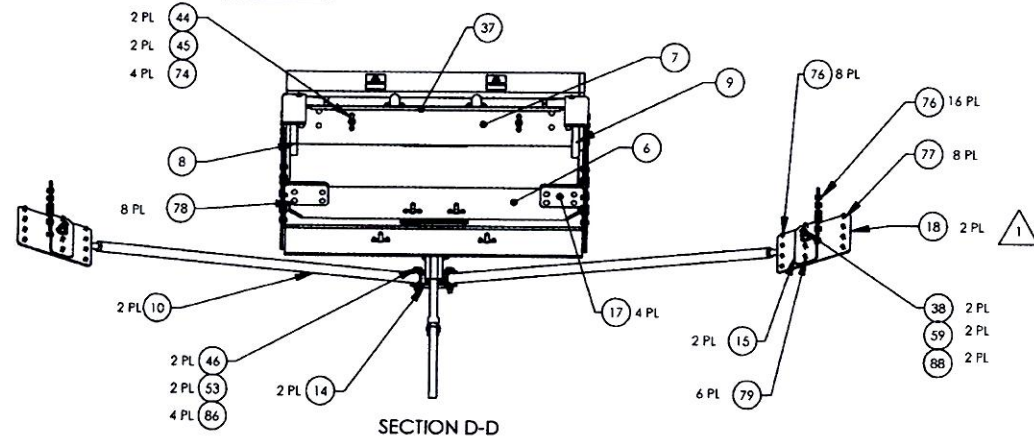
SECTION B-B



SECTION C-C

ORIGINAL DATE 11/24/99	3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760)-724-5300	
DRAWN BY A. GUAN	CHECKED BY D. HARRIS	
DRAWING APPROVAL P. BRAVO		
CONTRACT NO.		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES 1 DECIMAL PLACE 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		
SEE CAGE CODE B 07M26	DWG. NO. 647.7300	REV. C
SCALE NONE	SHEET 4 OF 8	

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES DSA DART AEROSPACE. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES DSA DART AEROSPACE IS PROHIBITED.



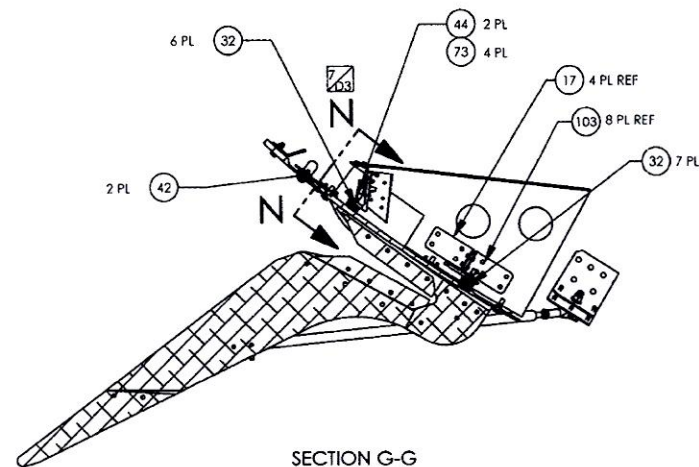
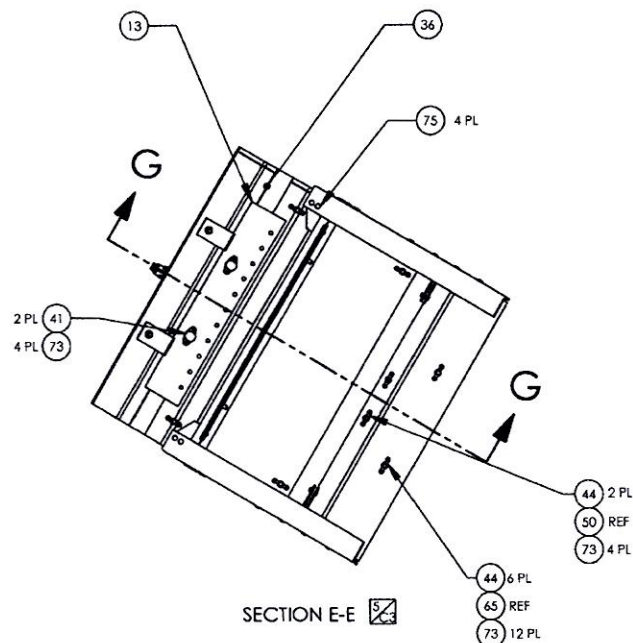
ORIGINAL DATE: 1/24/89		APPROVAL: [Signature]	
DRAWN BY: A. QUAN		CHECKER: [Signature]	
DRAWING APPROVAL: [Signature]		DATE: 1/24/89	
CONTRACT NO.		SHEET 5 OF 8	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°			
SCALE: NONE		REV: C	

DART 3030 ENTERPRISE CT., SUITE A
VISTA, CA. 92081
APICAL INDUSTRIES, INC.
(760) 724-5300

EC135 CABLE CUTTERS KIT

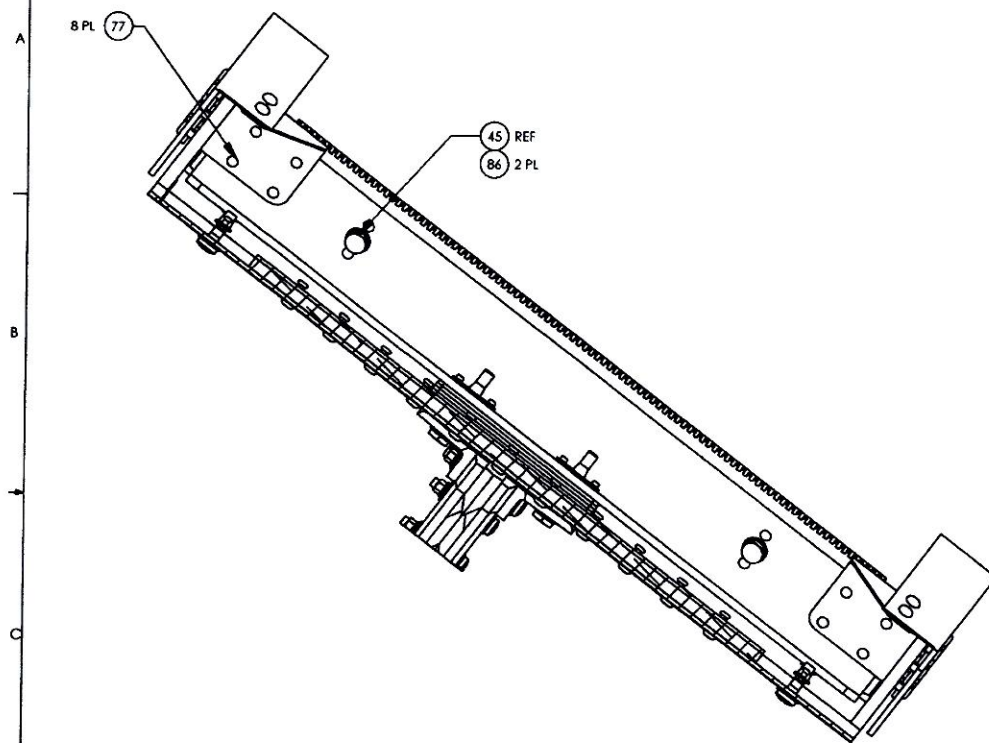
SERIAL CODE: B 07M26 DWG. NO. 647.7300
SCALE: NONE SHEET 5 OF 8

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES DBA DART AEROSPACE. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES DBA DART AEROSPACE IS PROHIBITED.



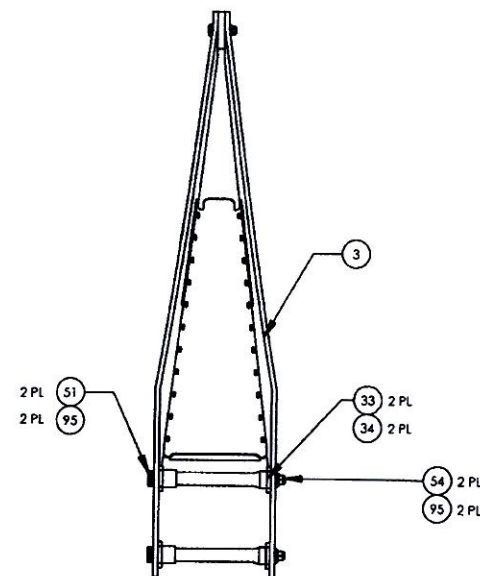
ORIGINAL DATE: 11/24/09		DART AEROSPACE 3030 ENTERPRISE CT., SUITE A, VISTA, CA. 92081 (760)-724-5300	
DRAWN BY: A. QUINN		EC135 CABLE CUTTERS KIT	
DRAWING APPROVAL: P. BRAYNO		SHEET 6 OF 8	
CONTRACT NO.		REV. C	
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES		SCALE: NONE	
TOLERANCES ARE:		DWG. NO. 647.7300	
2 PLACE DECIMALS ±.01		SHEET 6 OF 8	
3 PLACE DECIMALS ±.005		SCALE: NONE	
ANGLES ±.5°		SHEET 6 OF 8	

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SECTION N-N

INBOARD →

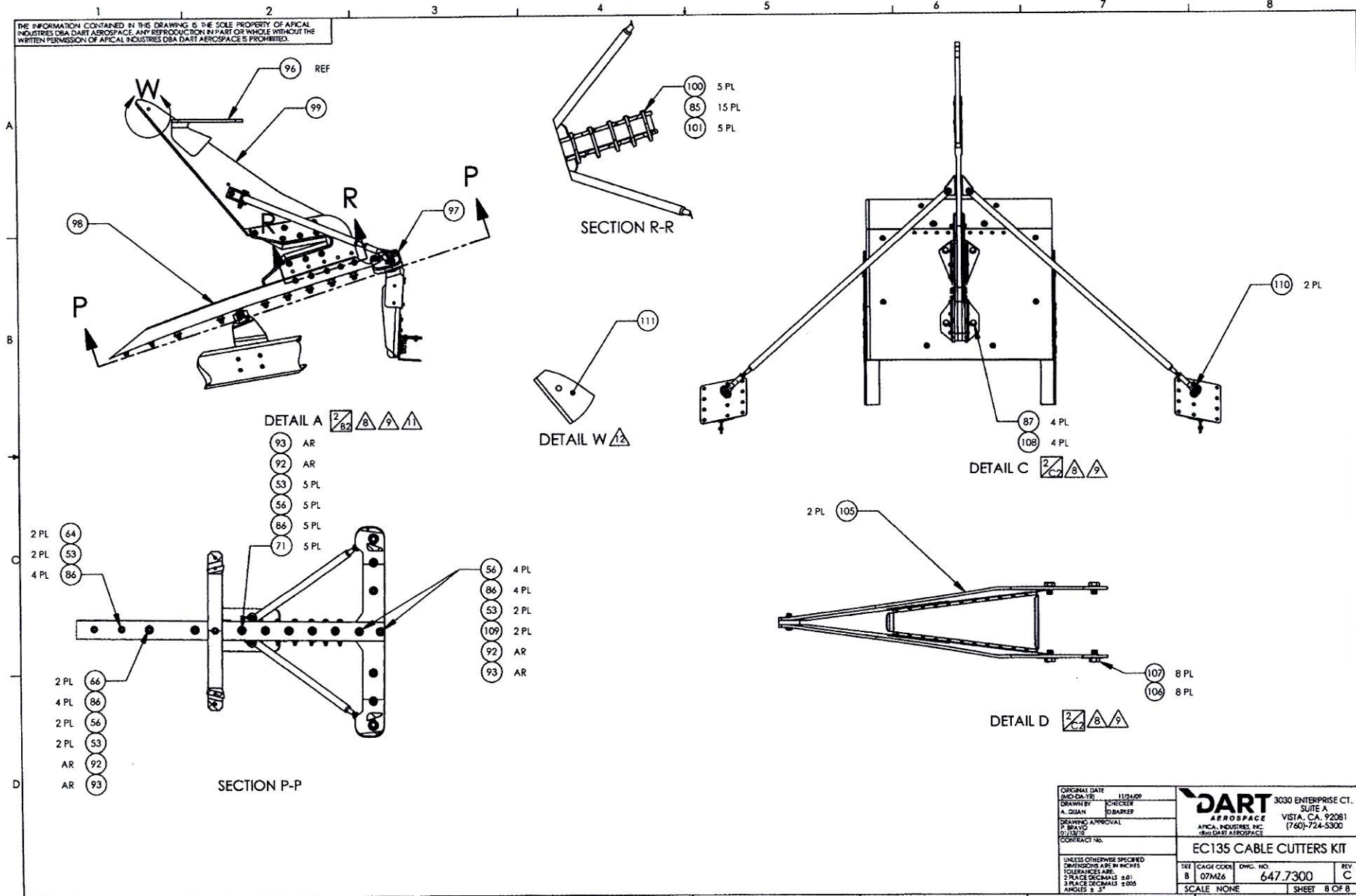


DETAIL D
TYP 2 PL

ORIGINAL DATE 11/24/09		DART 3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760) 724-5300	
DRAWN BY A. QJAH		CHECKED D. BARKER	
DRAWING APPROVAL A. B. W. 01/13/10		AFICAL INDUSTRIES INC. (DSO DART AEROSPACE)	
CONTRACT NO.		EC135 CABLE CUTTERS KIT	
REV B	CAGE CODE 07M26	DWG. NO. 647.7300	REV. C
SCALE NONE		SHEET 7 OF 8	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
3 PLACE DECIMALS ±.01
ANGLES ±.5°

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REFERENCE ONLY

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NOTES: UNLESS OTHERWISE SPECIFIED

- 1 AFTER INSTALLATION, APPLY F/N 90 A/R TO FILL GAPS AND FILLET EDGES.
- 2 APPLY F/N 91 TO FAYING SURFACES.
- 3 DELETED.
- 4 MATCH DRILL HOLES THROUGH F/N 26 or F/N 98 AND FUSELAGE.
- 5 SHIM GAP BETWEEN F/N 1 & 26 AS NEEDED.
- 6 AT CUSTOMERS OPTION, INSTALL F/N 96 BY MATCH DRILLING ONTO F/N 1 FOR KIT P/N 647.7301 or F/N 99 FOR KIT P/N 647.7304.
- 7 647.7301 INSTALLATION FOR EC135.
- 8 647.7304 INSTALLATION FOR EC135 T2/P2.
- 9 EXCEPT WHERE NOTED, INSTALLATION FOR 647.7304 AND 647.7307 SAME AS 647.7301.
- 10 CUT LENGTH: 16 INCHES.
- 11 INSTALLATION FOR 647.7307 AND 647.7304 ARE IDENTICAL EXCEPT 647.1405 (F/N 111) REPLACES 647.1404 (F/N 99).
- 12 DETAIL W REFLECTS THE UNIQUE 647.1405 ASSEMBLY (F/N 111) USED ON 647.7307 THAT REPLACES 647.1404 (F/N 99) ON 647.7304.
- 13 ADDITIONAL KITS FOR SUB-ASSEMBLIES OF THE 647.7301, 647.7304, AND 647.7307 ASSEMBLIES ARE DEFINED BY MPP-195

4	4	4	50	601.3130	BOLT	NAS6603-16	
4	4	4	49	601.1500	BOLT	NAS6603-12	
4	4	4	48	601.2669	BOLT	ANAC7A	
1	1	1	47	601.1324	BOLT	ANAC6A	
4	4	4	46	601.2826	BOLT	AN3-11A	
2	2	2	45	601.2823	BOLT	AN3-4A	
12	12	12	44	600.0795	NUTPLATE	MS21047-3	
2	2	2	43	601.3004	CAMLOC STUD		
2	2	2	42	601.3005	CAMLOC RETAINER		
2	2	2	41	601.3006	CAMLOC RECEPTACLE		
4	4	4	40	601.3119	CLEVIS	AN665-34R	
2	2	2	39	601.3120	EYE BOLT	AN66-12A	
			38	601.3121	EYE BOLT	AN66-5A	
1	1	1	37	601.3007	GROMMET	MS21266-24	
A/R	A/R	A/R	36	601.3011	P-SEAL		△
1	1	1	35	647.3201	GROUNDING CABLE ASSY		
			34	647.2511	NUT		
			33	647.2510	SLEEVE		
13	13	13	32	647.1812	SHIM		
2	2	2	31	647.1811	SPACER		
1	1	1	30	647.1602	DOUBLER ASSY		
1	1	1	29	647.1914	BRACKET		
1	1	1	28	647.7822	EYE BOLT FITTING RH		
1	1	1	27	647.7821	EYE BOLT FITTING LH		
			26	647.7818	MOUNTING CHANNEL		
7307	7304	7301	FIND #	PART #	DESCRIPTION	MATL	SPEC

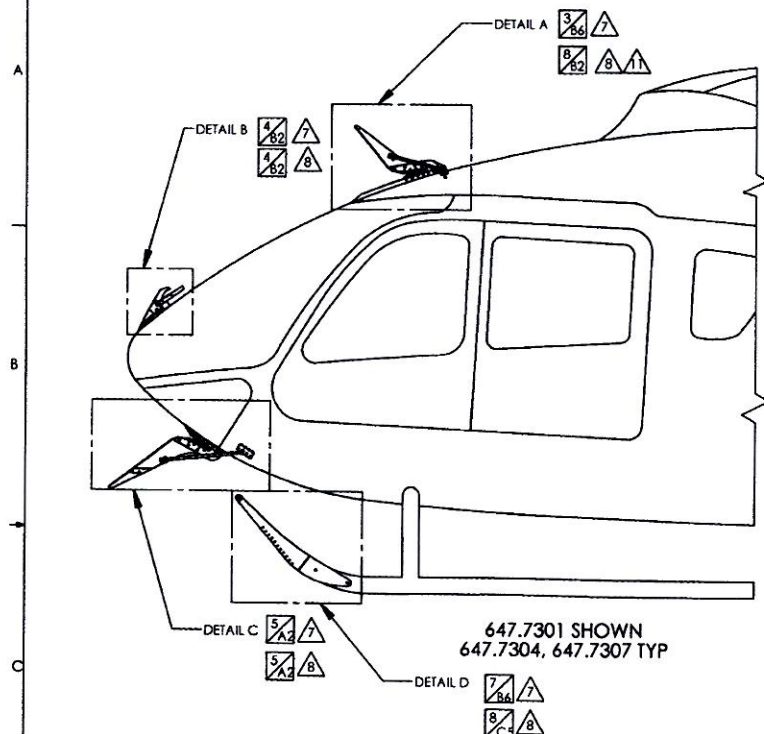
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	LAST PROTOTYPE REVISION PER		N/C
N/C	INITIAL RELEASE	01/13/09	P. BRAVO
A	INCORPORATED ECHS 00738, 03002, 03044, 03046	02/12/11	P. BRAVO
B	INCORPORATED ECH 03225	03/07/14	P. BRAVO
C	INCORPORATED ECH 05550, 05465	11/01/14	P. BRAVO

		1	25	647.7820	CROSS BRACKET AFT		
1	1	1	24	647.7819	CROSS BRACKET FWD		
1	1	1	23	647.7918	BRACKET		
1	1	1	22	647.7917	BRACKET		
2	2	2	21	647.7916	BRACKET		
1	1	1	20	647.7915	BRACKET		
1	1	1	19	647.7914	BRACKET		
2	2	2	18	647.7913	DOUBLER		
4	4	4	17	647.7912	CLIP		
2	2	2	16	647.7911	BRACKET		
2	2	2	15	647.7910	ANGLE BRACKET		
4	4	4	14	647.0112	STRUT BRACKET		
1	1	1	13	647.1810	NOSE DOOR DOUBLER		
1	1	1	12	647.1818	NOSE DOOR SPACER		
2	2	2	11	647.7701	STRUT ASSY		
2	2	2	10	647.7702	STRUT ASSY		
1	1	1	9	647.1815	GUSSET, RH		
1	1	1	8	647.1814	GUSSET, LH		
1	1	1	7	647.1915	SUPPORT ANGLE		
1	1	1	6	647.1913	TEE		
1	1	1	5	647.1610	WIPER DEFLECTOR, FWD		
1	1	1	4	647.1601	WIPER DEFLECTOR ASSY, AFT		
			3	647.1701	SKID DEFLECTOR ASSY		
1	1	1	2	647.7501	LOWER CUTTER ASSY		
			1	647.7401	UPPER CUTTER ASSY		
X				647.7307	EC135 T3/P3 CABLE CUTTERS KIT		△
				647.7306	T2/P2 REMOVABLE PROVISIONS KIT		△
				647.7305	T2/P2 FIXED PROVISIONS KIT		△
X				647.7304	EC135 T2/P2 CABLE CUTTERS KIT		△
				647.7303	T1/P1 REMOVABLE PROVISIONS KIT		△
				647.7302	T1/P1 FIXED PROVISIONS KIT		△
				647.7301	EC135 T1/P1 CABLE CUTTERS KIT		△
7307	7304	7301	FIND #	PART #	DESCRIPTION	MATL	SPEC

QTY	1	ORIGINAL DATE (MM/DD/YY)	11/2/09
NEXT ASSY (S)		DRAWN BY A. QUAN	11/2/09
		CHECKED BY D. QUAN	11/2/09
		DRAWING APPROVAL P. BRAVO	01/13/09
		CONTRACT NO.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS ±.015 ANGLES ±.5°			
DART AEROSPACE APICAL INDUSTRIES, INC. DBA DART AEROSPACE		3030 ENTERPRISE CT., SUITE A VISTA, CA 92081 (760)-724-5300	
EC135 CABLE CUTTERS KIT			
REV.	C	DWG. NO.	647.7300
SCALE	1 OF 8		

REFERENCE ONLY

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1			111	647.1405	CUTTER ASSY (UPPER)		
2	2		110	601.3902	EYE BOLT		
2	2		109	601.2910	SCREW	MS27039-1-18	
4	4		108	601.3963	BOLT	93635A-212	
8	8		107	601.3654	BOLT	LHP037-08018	
8	8		106	601.3655	LOCK WASHER	LHP025-08006	
2	2		105	647.1702	SKID DEFLECTOR ASSY		
8	8	8	104	601.3214	CHERRY RIVET	CR3323-5-3	
24	24	24	103	601.3213	CHERRY RIVET	CR3323-4-4	
4	4	4	102	601.3212	CHERRY RIVET	CR3323-4-3	
5	5		101	601.1541	LOCKNUT	MS21042-08	
5	5		100	601.2765	SCREW	MS27039-0819	
1	1		98	647.2114	UPPER U CHANNEL		
1	1		97	647.7823	CROSS BRACKET AFT		
1	1	1	96	647.5701	GPS MOUNT KIT		
7307	7304	7301	FIND #	PART #	DESCRIPTION	MAT'L	SPEC

		8	95	601.1097	WASHER	NAS1149F0463P	
		1	94	647.7919	SHIM		
A/R	A/R	A/R	93	600.0990	MAGNOBOND 6398 PART A		
A/R	A/R	A/R	92	600.0991	MAGNOBOND 6398 PART B		
A/R	A/R	A/R	91	601.2045	RTV	LOCTITE 588	
A/R	A/R	A/R	90	600.1012	SEALANT	PR-1425 CLASS 5	
3	3	3	89	601.2375	WASHER		
4	4	4	88	601.3126	WASHER	NAS1149F0532P	
12	12	8	87	601.3663	WASHER	NAS1149C0432P	
89	89	86	86	601.1607	WASHER	NAS1149F0532P	
25	25	14	85	601.2764	WASHER	NAS1149F0532P	
2	2	2	84	601.3136	CHERRY RIVET	CR3212-5-6	
8	8	8	83	601.3215	CHERRY RIVET	CR3522-5-3	
8	8	8	82	601.3216	CHERRY RIVET	CR3522-4-3	
12	12	12	81	601.2481	CHERRY RIVET	CR3213-5-4	
16	16	16	80	601.2020	CHERRY RIVET	CR3213-5-3	
17	17	17	79	601.2991	CHERRY RIVET	CR3213-4-6	
8	8	8	78	601.1183	CHERRY RIVET	CR3213-4-5	
16	16	16	77	601.1915	CHERRY RIVET	CR3213-4-4	
24	24	24	76	601.0790	CHERRY RIVET	CR3213-4-3	
4	4	4	75	601.1604	CHERRY RIVET	CR3213-4-2	
4	4	4	74	601.1983	NUTPLATE RIVET	CCR27455-3-03	
24	24	24	73	601.2207	NUTPLATE RIVET	CCR26455-3-03	
3	3	3	72	601.2999	SCREW		
5	5	6	71	601.2829	SCREW	MS24694554	
2	2	2	70	601.1954	SCREW	MS27039-1-17	
4	4	4	69	601.2637	SCREW	MS27039-1-16	
1	1	1	68	601.3012	SCREW	MS27039-1-15	
4	4	4	67	601.1622	SCREW	MS27039-1-14	
2	2	2	66	601.1953	SCREW	MS27039-1-12	
6	6	6	65	601.1365	SCREW	MS27039-1-10	
12	12	12	64	601.3069	SCREW	MS27039-1-09	
3	3	3	63	601.2198	SCREW	MS27039-1-07	
		2	62	601.3137	SCREW	MS27039-0816	
4	4	4	61	601.2988	SCREW	MS27039-0813	
1	1	1	60	601.2525	SCREW	MS27039-0807	
4	4	4	59	601.3127	LOCKNUT	MS21042L5	
2	2	2	58	647.8512	INSERT		
4	4	4	57	647.8511	INSERT		
20	20	18	56	647.8510	INSERT		
4	4	4	55	601.3128	NUT	AN316CAR	
4	4	8	54	601.3209	LOCKNUT	MS21042L4	
35	35	34	53	601.2943	LOCKNUT	MS21042-3	
5	5	7	52	601.2973	LOCKNUT	MS21042-06	
		4	51	601.3002	BOLT	NAS6604-66	
7307	7304	7301	FIND #	PART #	DESCRIPTION	MAT'L	SPEC

ORIGINAL DATE
11/24/08
DRAWN BY
A. QUINN
CHECKED BY
D. BAKER
DRAWING APPROVAL
P. WATSON
DATE
11/23/09
CONTRACT NO.

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
2 PLACE DECIMALS ±.01
3 PLACE DECIMALS ±.005
ANGLES ±.5°

DART 3030 ENTERPRISE CT., SUITE A
VISTA, CA. 92081
(760)-724-5300
APICAL INDUSTRIES INC.
DBA DART AEROSPACE
EC135 CABLE CUTTERS KIT
REV. C
SCALE: NONE
SHEET 2 OF 8